Identification and Evaluation of Viable Remediation Alternatives to address Injuries related to Land Disposal of Poultry Waste within the Illinois River Watershed

Prepared by:

Todd W. King, P.E.1, BCEE2

My fee for this work is \$175 per hour in accordance with the contract terms and conditions between Motley-Rice and CDM.

I have not provided depositions or expert testimony in the previous four years.

¹ Professional Engineer No. 35557 Michigan

² Board Certified Environmental Engineer, American Academy of Environmental Engineers



Illinois River Watershed – Evaluation of Remediation Options Confidential - Attorney Work Product

Section 6 Summary of Remedial Alternatives

The remedial alternatives evaluated in Section 4 are summarized as follows:

Summary of Costs for Remedial Alternatives												
Illinois River Watershed												
PRELIMINARY COST ESTIMATE FOR ALL REMEDIAL ALTERNATIVES												
Tab Number	Description	Take.			est di Hurnali the Environ	Led Hearth And Andrews	hicade his and his and his his and his and his and his and his and his and his his his and his his his his his	A nodility Rough real	of trouting captures of the control		t Stand Profect	Present Morth Cost
1	4.3.1 Removal - Cessation with proper poultry waste management	P, N, Bacteria	High	High	High	High	High	Yes	\$0	\$16,107,000	\$199,872,000	
2	4.3.2 Treatment - Buffer strips along fields (all streams)	P, N, Bacteria	Medium	High	Medium	Low	Low	Yes	\$271,183,000	\$55,202,550	\$956,194,000	
3	4.3.2 Treatment - Buffer strips along fields (>3rd order streams)	P, N, Bacteria	Low	High	Medium	Low	Low	Yes	\$42,619,000	\$8,675,550	\$150,274,000	
4	4.3.3.1 Treatment - Residential drinking water systems (with cessation 190 wells & without cessation 980 wells)	N, Bacteria	Medium	High	Medium	High	High	Yes	\$432,000 to \$4,713,000	\$148,200 to \$479,891	\$2,271,000 to \$10,668,000	
5	4.3.3.2 Treatment - Residential drinking water supplied (with cessation 190 wells & without cessation 980 wells)	N, Bacteria	Medium	High	Medium	None	High	Yes	\$0	\$1,444,456 to \$7,450,352	\$17,924,000 to \$92,452,000	
6	4.3.3.4 Treatment - Residential drinking water replace wells (with cessation 190 wells & without cessation 980 wells)	N, Bacteria	Medium	High	High	None	High	Yes	\$5,805,000 to \$29,939,000	\$0	\$5,805,000 to \$29,939,000	
7	4.4.1 Treatment – Drinking water surface water treatment (IRW rivers and stream WTPs)	DBPs	High	High	High	High	High	Yes	\$220,342,000	\$18,635,763	\$451,594,000	
8	4.5.1 Treatment - Drinking water surface water treatment (Lake Tenkiller WTPs)	DBPs	High	High	High	High	High	Yes	\$232,705,000	\$28,219,525	\$582,882,000	

